

WHAT IS CLAIMED IS

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1. A semiconductor integrated circuit,
comprising:

10 a differential calculating unit which
obtains a differential between a value of a pixel of
interest and values of surrounding pixels contained
in an image signal supplied from an image sensor;

a dead-zone generating unit which defines
a predetermined range of pixel values; and

15 a comparison unit which checks whether the
differential falls outside the predetermined range,

wherein contour enhancement is applied to
the pixel of interest in response to a determination
by the comparison unit that the differential falls
outside the predetermined range.

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2. The semiconductor integrated circuit as
25 claimed in claim 1, further comprising a enhancement
value generating unit which obtains an enhancement
value based on differentials between the value of
the pixel of interest and the values of the
surrounding pixels, said enhancement value
30 generating unit adding the enhancement value to the
value of the pixel of interest in response to the
determination by the comparison unit that the
differential falls outside the predetermined range.

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3. The semiconductor integrated circuit as
claimed in claim 1, wherein said differential
calculating unit obtains the differential by using
only a green-color component among a plurality of
5 color components of the image signal.

10 4. The semiconductor integrated circuit as
claimed in claim 1, wherein said differential
calculating unit obtains the differential by using
only a green-color component among a plurality of
color components of the image signal, and said
15 enhancement value generating unit obtains the
enhancement value by using only the green-color
component.

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5. The semiconductor integrated circuit as
claimed in claim 1, further comprising a luminance
signal generating unit which obtains a luminance
25 component from a plurality of color components of
the image signal, and said differential calculating
unit obtains the differential by using only the
luminance component.

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6. The semiconductor integrated circuit as
claimed in claim 1, further comprising a luminance
35 signal generating unit which obtains a luminance
component from a plurality of color components of
the image signal, wherein said differential

calculating unit obtains the differential by using only the luminance component, and said enhancement value generating unit obtains the enhancement value by using only the luminance component.

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7. The semiconductor integrated circuit as claimed in claim 1, wherein said differential calculating unit obtains a difference between the value of the pixel of interest and an average of the values of the surrounding pixels as said differential.

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8. The semiconductor integrated circuit as claimed in claim 1, wherein said differential calculating unit obtains a difference between the value of the pixel of interest and a value of an adjacent pixel with respect to each of four neighboring pixels as said differential, and the comparison unit checks whether the differential falls within the predetermined range with respect to each of the four neighboring pixels.

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9. The semiconductor integrated circuit as claimed in claim 8, wherein said enhancement value generating unit selects a differential having a largest absolute value among each said differential corresponding to the four neighboring pixels, and performs said contour enhancement in response to

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size of the differential having the largest absolute value.

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10. The semiconductor integrated circuit as claimed in claim 9, wherein said contour enhancement is not performed if an absolute value of a largest one of each said differential corresponding to the four neighboring pixels is identical to an absolute value of a smallest one of each said differential corresponding to the four neighboring pixels.

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11. A method of enhancing contours, comprising the steps of:
obtaining a differential between a value of a pixel of interest and values of surrounding pixels contained in an image signal supplied from an image sensor;
defining a predetermined range of pixel values;
checking whether the differential falls outside the predetermined range; and
applying contour enhancement to the pixel of interest in response to a determination that the differential falls outside the predetermined range.

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